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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,969	09/11/2000	Winfried Edelmann	AHN-001DV2	5790
959 75	590 12/04/2001			
LAHIVE & COCKFIELD			EXAMINER	
28 STATE STREET BOSTON, MA 02109			PARAS JR, PETER	
		/	ART UNIT	PAPER NUMBER
			1632	7
			DATE MAILED: 12/04/2001	٥

Please find below and/or attached an Office communication concerning this application or proceeding.

0	Application No.					
	Application No.	Applicant(s)				
Office Action Summary	09/658,969	EDELMANN ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication and	Peter Paras	1632				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
1) Responsive to communication(s) filed on						
	— · s action is non-final.					
, <u> </u>		prosecution as to the marite is				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>16,17 and 22-31</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8)⊠ Claim(s) <u>16,17 and 22-31</u> are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accept						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	nary (PTO-413) Paper No(s) nal Patent Application (PTO-152)				

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DETAILED ACTION

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Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 15-17, 22, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein the activity of MSH5 is inhibited, and wherein said compound is a contraceptive, classified in class 435, subclass 4.
- II. Claims 15-17, 23-24, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein the compound can modulate expression of MSH5, and wherein said compound is an antisense MSH5 nucleic acid molecule, classified in class 536, subclass 24.5.
- III. Claims 15, 25, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a small molecule, classified in class 436, subclass 501.
- IV. Claims 15, 26, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is an antibody, classified in classes 435, and 530 subclasses 7.1, and 387.1.

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V. Claims 15, 27, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a peptide, classified in class 435, subclass 7.2.

- VI. Claims 15, 28, and 30 drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a peptidomimetic, classified in class 424, subclass 184.1.
- VII. Claims 15 and 29-30, drawn to an *in vitro* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is has an effect on an MSH5 substrate, classified in class 435, subclass 6.
- VIII. Claims 15-17, 22, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein the activity of MSH5 is inhibited, and wherein said compound is a contraceptive, classified in class 435, subclass 4.
- IX. Claims 15-17, 23-24, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein the compound can modulate expression of MSH5, and wherein said compound is an antisense MSH5

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nucleic acid molecule, classified in classes 536 and 514, subclasses 24.5 and 44.

- X. Claims 15, 25, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a small molecule, classified in class 436, subclass 501.
- XI. Claims 15, 26, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is an antibody, classified in classes 435, 424, and 530 subclasses 7.1,130.1, and 387.1.
- XII. Claims 15, 27, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a peptide, classified in classes 424 and 435, subclasses 185.1 and 7.2.
- XIII. Claims 15, 28, and 31 drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing MSH5 with a compound, wherein said compound is a peptidomimetic, classified in class 424, subclass 184.1.
- XIV. Claims 15 and 29-31, drawn to an *in vivo* method for modulating MSH5 expression or activity comprising contacting MSH5 or a cell expressing
 MSH5 with a compound, wherein said compound is has an effect on an

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MSH5 substrate, classified in classes 514, 424, and 435, subclasses 44, 184.1, and 6.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods, restriction is deemed to be proper between groups I-XIV because their methods appear to constitute patentably distinct inventions, each with a distinct purpose and further comprising distinct methodologies and using different products that require different technical considerations. Because these inventions are distinct for the reasons given above and a separate search is required for each of Groups I-VII, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner(s) should be directed to Peter Paras, Jr., whose telephone number is 703-308-8340. The examiner can normally be reached Monday-Friday from 8:30 to 4:30 (Eastern time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karen Hauda, can be reached at 703-305-6608. Papers related to this application may be submitted by facsimile transmission. Papers should be faxed via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center numbers are (703)308-4242 and (703)305-3014.

Inquiries of a general nature or relating to the status of the application should be directed to Kay Pinkney whose telephone number is (703) 305-3553.

Peter Paras, Jr.

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DEBORAH J. R. CLARK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600